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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/936,306	12/03/2001	Erwin Reyzl	1454.1094	2570

21171 7590 04/08/2005

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EXAMINER

KANG, INSUN

ART UNIT	PAPER NUMBER
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2193

DATE MAILED: 04/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/936,306

Applicant(s)

REYZL ET AL.

Examiner

Insun Kang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-19 and 21-25 is/are pending in the application.
- 4a) Of the above claim(s) 20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-19 and 21-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 December 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>12/23/2004</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to the amendment filed 12/23/2004.
2. As per applicant's request, claim 20 has been cancelled and claims 14, 15, and 23-25 have been amended. Claims 14-19 and 21-25 are pending in the application.

Information Disclosure Statement

3. The IDS filed 12/23/2004 has been acknowledged.

Drawings

4. The drawings are objected to because: In Fig 3, there appears to be an error due to translation: Drucker, Speicher, etc are not English words. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the

changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

*Note: The drawings filed 12/23/2004 are identical to the original drawings filed 9/12/2001. The corrected drawings have not been submitted; accordingly, the objection to the drawings is maintained.

Specification

5. The objection to the abstract has been withdrawn due to the amendment to the Specification.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

7. Claims 14-22 and 23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 14 recites the limitation "the messages" in line 8. There is insufficient antecedent basis for this limitation in the claim. Only a single message is previously generated in line 5.

As per claims 15-22, these claims are rejected for dependency on the above rejected parent claim 14.

Claim 23 recites the limitation "the messages" in line 8. There is insufficient antecedent basis for this limitation in the claim. Only a single message is previously generated in line 5.

*Note: the rejected claims 14-22 and 23 have not been corrected; accordingly, the rejections to the claims above are maintained.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 14-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Wygodny et al. (US Patent 6,282,701) hereinafter referred to as "Wygodny."

Per claim 14:

Wygodny discloses:

-monitoring a program distributed throughout a system (i.e. "The tracing library is configured to monitor execution of the client, and to collect trace data, based on

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selections in the trace options...The analyzer is preferably configured to run under the control of a multi-process operating system and to allow the developer to trace multiple threads and multiple processes," col. 3 lines 4-25; "The analyzer...and the agent...can trace a multithreaded and multi-processed client," col. 19 lines 34-45)

-checking for semantic correctness using predetermined heuristics (i.e. "The debug information ...is preferably created by a compiler when the client is compiled," col. 8 lines 21-32)

-adding to the program an instrumentation part of middleware associated with the program (i.e. "The trace function involves tracing the execution of the instrumented client process and reporting certain events to BugTrapper," col. 25 lines 65-67; "Some software developers attempt to resolve the problem of monitoring the execution of an application by [e]mbedding tracing code in the source code of the application," col. 2 lines 11-27; "The client 102 can be any type of software module...in multiple processes and/or multiple threads," col. 5 lines 60-65; col. 4 lines 60-67)

-generating a message in response to at least one operation, performed by the middleware and detected by the instrumentation part for transmission to a monitoring process (i.e. "to generate a trace file that represents execution of the client application at the remote site...and display the trace results ...on the display screen during execution of the client program," abstract; col. 28 Interprocess Communication section)

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-initiating at least one action by the monitoring process (i.e. "The trace records are written to a shared memory area called the trace buffer...and from there either displayed in the BugTrapper user interface by the analyzer," col. 29 lines 4-15)
-presenting a number of the messages as one of a list, a tree chart and a message sequence chart (i.e. "The trace tree..., in the trace tree pane...is a hierarchical tree showing trace data collected from the client," col. 18 lines 30-44) as claimed.

Per claim 15:

The rejection of claim 14 is incorporated, and further, Wygodny teaches:

-wherein at least one action includes at least one of:
displaying the message; intervention in execution of the program; and
controlling a unit associated with the program using at least one of open and closed-loop control("The trace records are written to a shared memory area called the trace buffer...and from there either displayed in the BugTrapper user interface by the analyzer," col. 29 lines 4-15)
as claimed.

Per claim 16:

The rejection of claim 14 is incorporated, and further, Wygodny teaches:

-waiting by the instrumentation part, after transmitting the message, for a response produced by the monitoring process ("The running window...allows the user...to...deselect any executables that are to be re-run from the start ...when the user

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does not want to attach to an executable that is already running...the user... selects a process from the list...to cause the BugTrapper to attach to the client processes and starts to collect trace data," col. 16 lines 54-67 and col. 17 lines 1-5; col. 28 Interprocess Communication section) as claimed.

Per claim 17:

The rejection of claim 16 is incorporated, and further, Wygodny teaches:

the response is produced after one of an input by a user and an automated sequence ("The running window...allows the user...to...deselect any executables that are to be re-run from the start ...when the user does not want to attach to an executable that is already running...the user... selects a process from the list...to cause the BugTrapper to attach to the client processes and starts to collect trace data," col. 16 lines 54-67 and col. 17 lines 1-5; col. 28 Interprocess Communication section) as claimed

Per claim 18:

The rejection of claim 14 is incorporated, and further, Wygodny teaches:

- the program is a part of a larger program (abstract) as claimed.

Per claim 19:

The rejection of claim 14 is incorporated, and further, Wygodny teaches:

- a function associated with the program is instrumented (col. 18 lines 30-44) as claimed.

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Per claim 21:

The rejection of claim 14 is incorporated, and further, Wygodny teaches:

- said monitoring includes monitoring at least one of a remote procedure call, a message transmission, and a control sequence (col. 18 lines 30-44; col. 25 lines 24-40) as claimed.

Per claim 22:

The rejection of claim 14 is incorporated, and further, Wygodny teaches:

- the program is used in a technical system (col. 2 lines 28-50) as claimed.

Per claim 23, it is the device version of claim 14, respectively, and is rejected for the same reasons set forth in connection with the rejection of claim 14 above.

Per claim 24, it is the computer readable medium version of claim 14, respectively, and is rejected for the same reasons set forth in connection with the rejection of claim 14 above.

Per claim 25, it is the device version of claim 14, respectively, and is rejected for the same reasons set forth in connection with the rejection of claim 14 above.

Response to Arguments

10. Applicant's arguments filed 12/23/2004 have been fully considered but they are not persuasive.

Per claims 14 and 23-25:

In response to the applicant's argument against the portion of the reference cited, the applicant should consider the reference as a whole, not only the specific portion of the reference cited.

The applicant argues that "the language cited in Wygodny et al. as supporting the rejection of claim [20] relates to how trace information is communicated, not what types of operations are traced" and nothing "has been cited or found in Wygodny...that program code can or should be inserted into a program to monitor middleware associated with the program...as opposed to monitoring the program in which an instrumentation part has been added (page 8)."

In response, Wygodny specifically states that the client "can be any type of software module...in multiple processes and/or multiple threads (col. 5 lines 60-65)" and the "BugTrapper tools instrument the client by inserting interrupt instructions at strategic points defined by the developer (col. 4 lines 60-67)." Therefore, Wygodny's client can be a software module of middleware operations and the instrumentation part can trace the execution of the middleware operations accordingly while the client is running. Accordingly, in view of the broadest reasonable interpretation above, Wygodny

discloses the limitations in the amended independent claims. Therefore, the rejection of claims 14 and 23-25 is considered proper and maintained.

Conclusion

11. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.


12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Insun Kang whose telephone number is 571-272-3724. The examiner can normally be reached on M-F 7:30-4 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on 571-272-3719. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

I. Kang
Examiner
3/22/2005


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